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PATENT
Attorney Docket No. 101.0056-07000
Customer No. 22882

#18

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent of:	)	
	)	
Gary K. Michelson, M.D.	)	Serial No.: 09/618,036
	)	
Patent No. 6,620,163	)	Filed: July 17, 2000
	)	
Issued: September 16, 2003	)	
	)	
For: Anterior Cervical Plating System and Bone Screw	)	

Certificate
OCT 0 2 2003
of Correction

Certificate of Correction Branch
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

CERTIFICATE OF MAILING VIA FIRST CLASS MAIL
Date of Deposit: September 22, 2003

I hereby certify that:

1. Request for Certificate of Correction with attachments
2. 2 pages of PTO-1050 (in duplicate)
3. Self-addressed return postcard receipt

are being deposited with the United States Postal Service to Addressee with sufficient postage as first class mail under 37 C.F.R. § 1.8 on the date indicated above and are addressed to:

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Date: 9/22/03

Anita Chou

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#18

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re U.S. Patent of:	
Gary Karlin Michelson, M.D.	Serial No.: 09/618,036
Patent No.: 6,620,163	Filed: July 17, 2000
Issue Date: September 16, 2003	
For: Anterior Cervical Plating System and Bone Screw	

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

REQUEST FOR CERTIFICATE OF CORRECTION

Pursuant to 35 U.S.C. § 254 and 37 C.F.R. § 1.322, this is a request for the issuance of a Certificate of Correction in the above-identified patent. Two (2) copies of PTO Form 1050 are appended. The complete Certificate of Correction involves two (2) pages.

The mistakes identified in the appended Form occurred through the fault of the Patent Office, as clearly disclosed by the records of the application which matured into this patent, and as evidenced in the attached copies of the following documents:

1) Page 9 of Amendment dated January 8, 2003, showing the correct dependency of issued claims 19 and 21 (corresponding pending claims 564 and 566);

2) Page 3 of Amendment dated January 8, 2003, showing the correct language of issued claim 32 (corresponding pending claim 539);

3) Page 11 of Amendment dated January 8, 2003, showing the correct language of issued claim 48 (corresponding pending claim 592);

4) Page 4 of Amendment dated January 8, 2003, showing the correct language of issued claim 94 (corresponding pending claim 541);

5) Page 5 of Amendment dated January 8, 2003, showing the correct language of issued claim 124 (corresponding pending claim 543);

6) Page 22 of Amendment dated January 8, 2003, showing the correct dependency of issued claims 196 and 207 (corresponding pending claims 735 and 746);

7) Page 23 of Amendment dated January 8, 2003, showing the correct dependency of issued claim 219 (corresponding pending claim 757); and

8) Page 24 of Amendment dated January 8, 2003, showing the correct dependency of issued claims 226 and 233 (corresponding pending claims 764 and 771).

Issuance of the Certificate of Correction containing the correction is earnestly requested.

Respectfully submitted,

MARTIN & FERRARO, LLP

Dated: 9-22-03

By: _____
Amedeo F. Ferraro
Registration No. 37,129

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UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

PATENT NO: 6,620,163

DATED: September 16, 2003

INVENTOR: Gary Karlin Michelson, M.D.

It is hereby certified that an error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 31
Line 28, change "11" to --1--
Line 33, change "11" to --1--

Column 32
Line 14, insert "a" before --shaft (first occurrence)--

Column 33
Line 5, insert "," after --thread--

Column 35
Line 35, change "Plating" to --A plating--

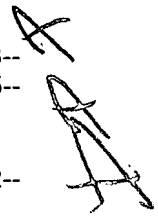
Column 37
Line 12, change "Plating" to --A plating--
Line 26, change "Insertion" to --insertion--

Column 41
Line 54, change "186" to --195--

Column 42
Line 16, change "202" to --186--

Column 43
Line 12, change "215" to --218--
Line 35, change "215" to --225--

Column 44
Line 17, change "215" to --232--



Mailing Address of Sender:
Martin & Ferraro, LLP
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PATENT NO. 6,620,163
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FORM PTO 1050 (Rev.2-93)

UNITED STATES PATENT AND TRADEMARK OFFICE

CERTIFICATE OF CORRECTION

OCT - 6 2003

PATENT NO: 6,620,163

DATED: September 16, 2003

INVENTOR: Gary Karlin Michelson, M.D.

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562. The plating system of claim 538, wherein said thread has opposed side faces being angled relative to each other to form an apex of said thread, said side faces forming an included angle in the range of 11 degrees to 30 degrees.

563. The plating system of claim 538, wherein said thread has opposed side faces, said side faces being angled relative to each other to form a base at said root diameter of said shaft and a crest opposite said base, said side faces having a thickness therebetween in the range of 0.25 mm to 0.60 mm at said base.

564. The plating system of claim 538, wherein said screw has an overall length in the range of 10 mm to 22 mm.

565. The plating system of claim 538, wherein said head has a maximum root diameter no greater than the maximum root diameter of said shaft.

566. The plating system of claim 538, wherein said head has a top surface that is at least in part curved.

567. The plating system of claim 538, wherein said head has a length parallel to the mid-longitudinal axis of said shaft in the range of 1 mm to 3 mm.

568. The plating system of claim 538, wherein said head has a diameter in the range of 3.8 mm to 6 mm.

569. The plating system of claim 538, wherein at least a portion of said plating system comprises at least in part of one of bone and bone growth promoting material.

570. The plating system of claim 569, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

571. The plating system of claim 538, in combination with a bone growth promoting material.

572. The plating system of claim 571, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

573. The plating system of claim 538, wherein at least a portion of said plating system is treated with a bone growth promoting substance.

574. The plating system of claim 538, wherein at least a portion of said plating system is at least in part resorbable.

portion than proximate said first shaft portion, said screw being made of a material suitable for implantation into the human skeleton.

539. A plating system, comprising:

an anterior cervical plate adapted to be applied to the anterior human cervical spine, said plate having a lower surface adapted to contact the anterior aspect of at least one cervical vertebral body and an upper surface opposite said lower surface, at least one bone screw receiving hole extending from said upper surface through said lower surface, said bone screw receiving hole being adapted to receive at least one bone screw for engaging the cervical vertebral body to attach said plate to the cervical spine; and

a bone screw adapted to attach said plate to the cervical vertebral body, said bone screw comprising:

a head adapted to block further forward motion of said screw through said bone screw receiving hole of said plate;

a tip for insertion into the cervical vertebral body;

a shaft between said tip and said head, said shaft having a mid-longitudinal axis and a root diameter at transverse cross sections along the mid-longitudinal axis, said shaft having a first shaft portion proximate said tip and a second shaft portion proximate said head, the root diameter of said first shaft portion being less than the root diameter of said second shaft portion; and

a thread along at least a portion of said shaft adapted to engage the cervical vertebral body, said thread having an outer diameter that is generally uniform along at least a substantial portion of each of said first and second shaft portions, said thread having a profile with opposed side faces and a crest, said crest along at least a portion of the length of said first shaft portion being substantially uniform along at least a portion of the length of said second shaft portion proximate said head, said screw being made of a material suitable for implantation into the human skeleton.

589. The plating system of claim 539, wherein said outer diameter of said thread diminishes proximate said tip.

590. The plating system of claim 539, wherein said thread has a maximum outer diameter in the range of 3.6 mm to 5.2 mm.

591. The plating system of claim 539, wherein said thread has a pitch in the range of 1.25 to 2.5 mm.

592. The plating system of claim 539, wherein said opposed side faces are angled relative to each other to form an apex of said thread, said side faces forming an included angle in the range of 11 degrees to 30 degrees.

593. The plating system of claim 539, wherein said opposed side faces are angled relative to each other to form a base at said root diameter of said shaft and said crest being opposite said base, said side faces having a thickness therebetween in the range of 0.25 mm to 0.60 mm at said base.

594. The plating system of claim 539, wherein said screw has an overall length in the range of 10 mm to 22 mm.

595. The plating system of claim 539, wherein said head has a maximum root diameter no greater than the maximum root diameter of said shaft.

596. The plating system of claim 539, wherein said head has a top surface that is at least in part curved.

597. The plating system of claim 539, wherein said head has a length parallel to the mid-longitudinal axis of said shaft in the range of 1 mm to 3 mm.

598. The plating system of claim 539, wherein said head has a diameter in the range of 3.8 mm to 6 mm.

599. The plating system of claim 539, wherein at least a portion of said plating system comprises at least in part of one of bone and bone growth promoting material.

600. The plating system of claim 599, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

601. The plating system of claim 539, in combination with a bone growth promoting material.

540. A plating system, comprising:

an anterior cervical plate adapted to be applied to the anterior human cervical spine, said plate having a lower surface adapted to contact the anterior aspect of at least one cervical vertebral body and an upper surface opposite said lower surface, at least one bone screw receiving hole extending from said upper surface through said lower surface, said bone screw receiving hole being adapted to receive at least one bone screw for engaging the cervical vertebral body to attach said plate to the cervical spine; and

a bone screw adapted to attach said plate to the cervical vertebral body, said bone screw comprising:

a head adapted to block further forward motion of said screw through said bone screw receiving hole of said plate;

a tip for insertion into the cervical vertebral body;

a shaft between said tip and said head, said shaft having a mid-longitudinal axis and a root diameter at transverse cross sections along the mid-longitudinal axis, said shaft having a first shaft portion proximate said tip and a second shaft portion proximate said head, the root diameter of said first shaft portion being less than the root diameter of said second shaft portion; and

a thread along at least a portion of said shaft adapted to engage the cervical vertebral body, said thread having an outer diameter that is generally uniform along at least a substantial portion of each of said first and second shaft portions, said thread having opposed side faces intersecting at an angle to form a crest along at least a portion of the length of said second shaft portion proximate said head, said thread having a pitch, said pitch along at least a portion of the length of said first shaft portion being substantially the same as said pitch along at least a portion of the length of said second shaft portion, said screw being made of a material suitable for implantation into the human skeleton.

541. A plating system, comprising:

an anterior cervical plate adapted to be applied to the anterior human cervical spine, said plate having a lower surface adapted to contact the anterior aspect of at

least one cervical vertebral body and an upper surface opposite said lower surface, at least one bone screw receiving hole extending from said upper surface through said lower surface, said bone screw receiving hole being adapted to receive at least one bone screw for engaging the cervical vertebral body to attach said plate to the cervical spine; and

a bone screw adapted to attach said plate to the cervical vertebral body, said bone screw comprising:

a head adapted to block further forward motion of said screw through said bone screw receiving hole of said plate;

a tip for insertion into the cervical vertebral body;

a shaft between said tip and said head, said shaft having a mid-longitudinal axis and a root diameter at transverse cross sections along the mid-longitudinal axis, said root diameter of said shaft being curved along at least a portion of the length of said shaft in a direction between said head and said tip along the mid-longitudinal axis of said shaft, said shaft having a first shaft portion proximate said tip and a second shaft portion proximate said head, the root diameter of said first shaft portion being less than the root diameter of said second shaft portion; and

a thread along at least a portion of said shaft adapted to engage the cervical vertebral body, said thread having an outer diameter that is generally uniform along at least a substantial portion of each of said first and second shaft portions, said screw being made of a material suitable for implantation into the human skeleton.

543. A plating system, comprising:

an anterior cervical plate adapted to be applied to the anterior human cervical spine, said plate having a lower surface adapted to contact the anterior aspect of at least one cervical vertebral body and an upper surface opposite said lower surface, at least one bone screw receiving hole extending from said upper surface through said lower surface, said bone screw receiving hole being adapted to receive at least one

733. The plating system of claim 545, wherein said leading end of said screw includes a tip that is at least one of pointed, tapered, and coned.

734. The plating system of claim 545, wherein said leading end of said screw includes a tip that is configured to be self-tapping.

735. The plating system of claim 734, wherein said tip includes at least one of a pointed tip, cutting flutes, and decreased thread height.

736. The plating system of claim 545, wherein said leading end of said screw has a tip with cutting flutes that interrupt at least one turn of said thread proximate said tip.

737. The plating system of claim 545, wherein said outer diameter of said thread diminishes proximate said leading end.

738. The plating system of claim 545, wherein said thread has a maximum outer diameter in the range of 3.6 mm to 5.2 mm.

739. The plating system of claim 545, wherein said thread has a pitch in the range of 1.25 to 2.5 mm.

740. The plating system of claim 545, wherein said screw has an overall length in the range of 10 mm to 22 mm.

741. The plating system of claim 545, further comprising a head adapted to block further forward motion of said screw through said bone screw receiving hole of said plate.

742. The plating system of claim 741, wherein said head has a maximum root diameter no greater than the maximum root diameter of said shaft.

743. The plating system of claim 741, wherein said head has a top surface that is at least in part curved.

744. The plating system of claim 741, wherein said head has a length parallel to the mid-longitudinal axis of said screw in the range of 1 mm to 3 mm.

745. The plating system of claim 741, wherein said head has a diameter in the range of 3.8 mm to 6 mm.

746. The plating system of claim 545, wherein at least a portion of said plating system comprises at least in part of one of bone and bone growth promoting material.

747. The plating system of claim 746, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

748. The plating system of claim 545, in combination with a bone growth promoting material.

749. The plating system of claim 748, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

750. The plating system of claim 545, wherein at least a portion of said plating system is treated with a bone growth promoting substance.

751. The plating system of claim 545, wherein at least a portion of said plating system is at least in part resorbable.

752. The plating system of claim 545, wherein at least a portion of said plating system is formed of a porous material.

753. The plating system of claim 545, wherein at least a portion of said plating system is treated to promote bone ingrowth between said plate and the adjacent vertebral bodies.

754. The plating system of claim 546, wherein said root diameter of said shaft is curved along at least a portion of the length of said shaft in a direction between said head and said tip along the longitudinal axis of said shaft.

755. The plating system of claim 754, wherein said root diameter of said shaft is at least a portion of a concave curve.

756. The plating system of claim 546, wherein said root diameter increases along a portion of said shaft in a direction from said tip toward said head of said screw.

757. The plating system of claim 756, wherein the rate of increase of said root diameter is greater proximate said head of said screw.

758. The plating system of claim 546, wherein said shaft has a first shaft portion proximate said tip and a second shaft portion proximate said head, said second shaft portion having a generally circular cross section.

759. The plating system of claim 546, wherein said shaft has a first shaft portion proximate said tip and a second shaft portion proximate said head, said second shaft portion being generally conical.

760. The plating system of claim 546, wherein said shaft has a first shaft portion proximate said tip and a second shaft portion proximate said head, said first shaft portion having a generally circular cross section.

761. The plating system of claim 546, wherein said shaft has a first shaft portion proximate said tip and a second shaft portion proximate said head, said first shaft portion being generally cylindrical.

762. The plating system of claim 546, wherein said tip is at least one of pointed, tapered, and coned.

763. The plating system of claim 546, wherein said tip is configured to be self-tapping.

764. The plating system of claim 763, wherein said tip includes at least one of a pointed tip, cutting flutes, and decreased thread height.

765. The plating system of claim 546, wherein said tip includes cutting flutes that interrupt at least one turn of said thread proximate said tip.

766. The plating system of claim 546, wherein said outer diameter of said thread diminishes proximate said tip.

767. The plating system of claim 546, wherein said thread has a maximum outer diameter in the range of 3.6 mm to 5.2 mm.

768. The plating system of claim 546, wherein said head has a maximum root diameter no greater than the maximum root diameter of said shaft.

769. The plating system of claim 546, wherein said head has a top surface that is at least in part curved.

770. The plating system of claim 546, wherein at least a portion of said plating system comprises at least in part of one of bone and bone growth promoting material.

771. The plating system of claim 770, wherein said bone growth promoting material is selected from one of bone, bone derived products, bone morphogenetic protein, and hydroxyapatite.

772. The plating system of claim 546, in combination with a bone growth promoting material.